

**Salt-Structured Deep-Water Sandstones, Assessment Unit 60360102**  
**Assessment Results Summary**

[MMBO, million barrels of oil. BCFG, billion cubic feet of gas. MMBNGL, million barrels of natural gas liquids. MFS, minimum field size assessed (MMBO or BCFG). Prob., probability (including both geologic and accessibility probabilities) of at least one field equal to or greater than the MFS. Results shown are fully risked estimates. For gas fields, all liquids are included under the NGL (natural gas liquids) category. F95 represents a 95 percent chance of at least the amount tabulated. Other fractiles are defined similarly. Fractiles are additive under the assumption of perfect positive correlation. Shading indicates not applicable]

Field Type	MFS	Prob. (0-1)	Undiscovered Resources												Largest Undiscovered Field (MMBO or BCFG)			
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)				F95	F50	F5	Mean
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	8	0.90	0	8,929	20,717	9,486	0	12,045	30,602	13,260	0	702	1,914	795	471	1,402	3,611	1,624
Gas Fields	48						0	3,681	11,497	4,413	0	157	520	194	327	1,327	5,499	1,886
Total		0.90	0	8,929	20,717	9,486	0	15,727	42,099	17,673	0	859	2,434	989				

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: Oil in Oil Fields**

**Summary:**

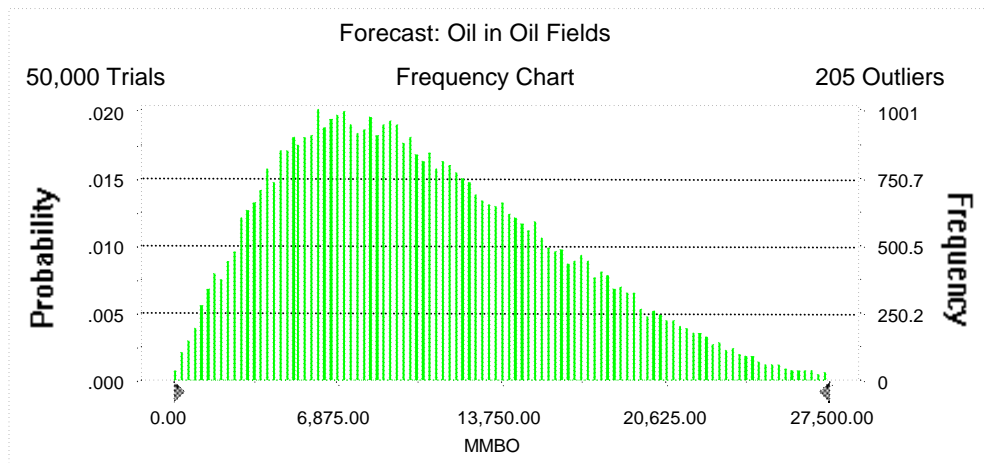
Display range is from 0.00 to 27,500.00 MMBO

Entire range is from 9.79 to 37,756.92 MMBO

After 50,000 trials, the standard error of the mean is 25.58

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	10,547.83
Median	9,736.45
Mode	---
Standard Deviation	5,720.24
Variance	32,721,090.55
Skewness	0.60
Kurtosis	2.92
Coefficient of Variability	0.54
Range Minimum	9.79
Range Maximum	37,756.92
Range Width	37,747.13
Mean Standard Error	25.58



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: Oil in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	9.79
95%	2,570.39
90%	3,689.50
85%	4,581.44
80%	5,370.13
75%	6,121.89
70%	6,839.71
65%	7,540.55
60%	8,275.61
55%	9,006.85
50%	9,736.45
45%	10,530.69
40%	11,380.16
35%	12,250.18
30%	13,236.18
25%	14,300.90
20%	15,487.53
15%	16,923.42
10%	18,593.67
5%	21,092.60
0%	37,756.92

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

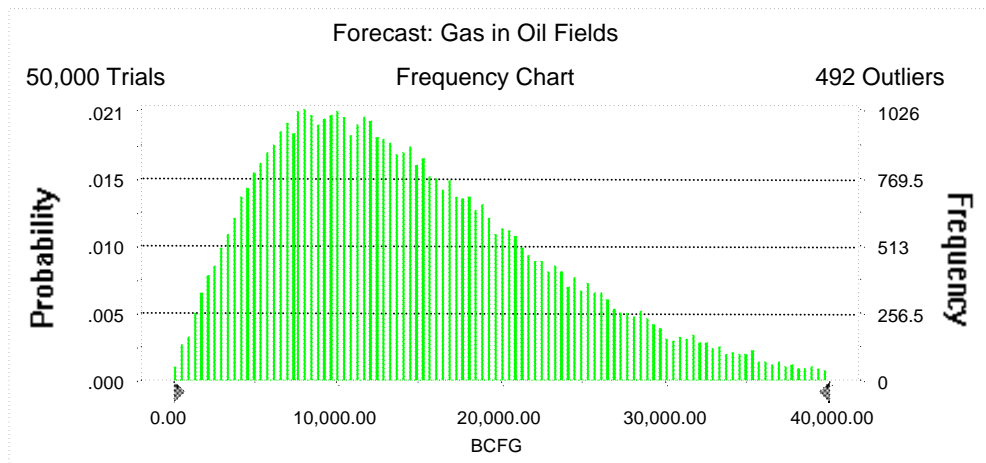
**Forecast: Gas in Oil Fields**

**Summary:**

Display range is from 0.00 to 40,000.00 BCFG  
Entire range is from 12.45 to 62,517.95 BCFG  
After 50,000 trials, the standard error of the mean is 38.86

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	14,743.95
Median	13,227.01
Mode	---
Standard Deviation	8,690.19
Variance	75,519,430.50
Skewness	0.88
Kurtosis	3.74
Coefficient of Variability	0.59
Range Minimum	12.45
Range Maximum	62,517.95
Range Width	62,505.50
Mean Standard Error	38.86



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: Gas in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	12.45
95%	3,335.88
90%	4,856.12
85%	6,051.83
80%	7,120.86
75%	8,121.94
70%	9,133.16
65%	10,128.93
60%	11,147.73
55%	12,159.86
50%	13,227.01
45%	14,382.33
40%	15,548.54
35%	16,855.86
30%	18,287.21
25%	19,844.18
20%	21,658.62
15%	23,903.68
10%	26,773.45
5%	31,284.55
0%	62,517.95

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

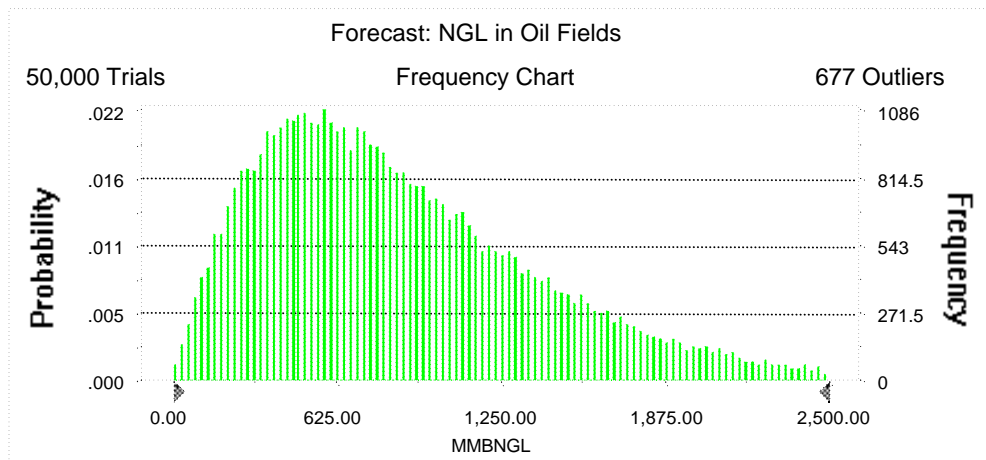
**Forecast: NGL in Oil Fields**

**Summary:**

Display range is from 0.00 to 2,500.00 MMBNGL  
Entire range is from 0.72 to 4,504.35 MMBNGL  
After 50,000 trials, the standard error of the mean is 2.51

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	885.03
Median	772.24
Mode	---
Standard Deviation	560.98
Variance	314,694.77
Skewness	1.12
Kurtosis	4.62
Coefficient of Variability	0.63
Range Minimum	0.72
Range Maximum	4,504.35
Range Width	4,503.63
Mean Standard Error	2.51



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: NGL in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.72
95%	185.46
90%	270.07
85%	342.58
80%	406.03
75%	465.88
70%	524.79
65%	584.82
60%	644.61
55%	708.92
50%	772.24
45%	840.34
40%	916.18
35%	998.02
30%	1,087.56
25%	1,188.96
20%	1,310.15
15%	1,456.52
10%	1,649.61
5%	1,959.81
0%	4,504.35

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

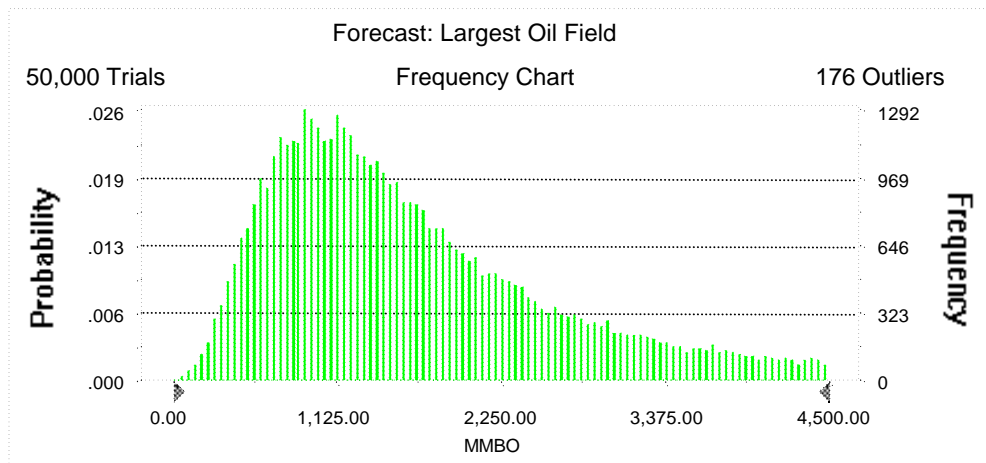
**Forecast: Largest Oil Field**

**Summary:**

Display range is from 0.00 to 4,500.00 MMBO  
Entire range is from 9.79 to 4,599.83 MMBO  
After 50,000 trials, the standard error of the mean is 4.22

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	1,624.33
Median	1,402.05
Mode	---
Standard Deviation	944.09
Variance	891,306.06
Skewness	0.98
Kurtosis	3.44
Coefficient of Variability	0.58
Range Minimum	9.79
Range Maximum	4,599.83
Range Width	4,590.04
Mean Standard Error	4.22





**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: Largest Oil Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	9.79
95%	470.60
90%	612.89
85%	724.44
80%	822.90
75%	917.85
70%	1,008.20
65%	1,104.76
60%	1,197.03
55%	1,294.85
50%	1,402.05
45%	1,513.23
40%	1,640.89
35%	1,777.75
30%	1,935.14
25%	2,123.58
20%	2,353.01
15%	2,641.80
10%	3,029.53
5%	3,611.45
0%	4,599.83

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

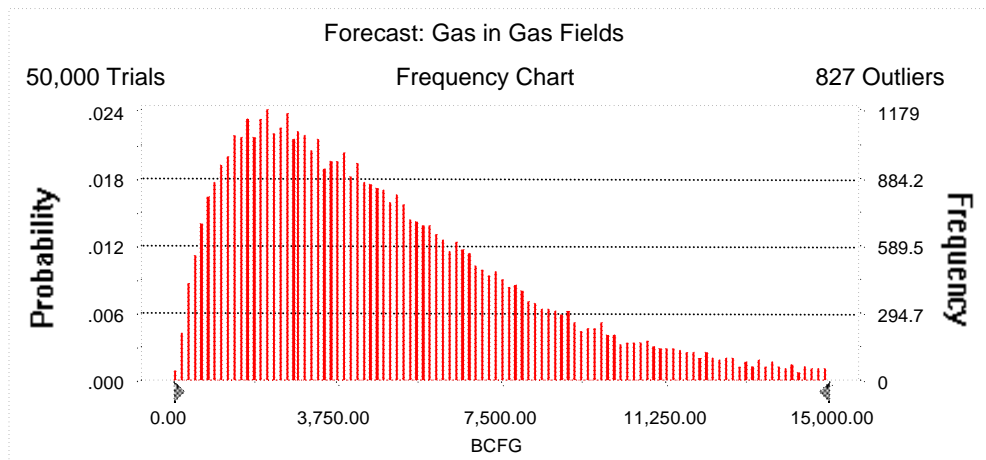
**Forecast: Gas in Gas Fields**

**Summary:**

Display range is from 0.00 to 15,000.00 BCFG  
Entire range is from 54.96 to 33,412.14 BCFG  
After 50,000 trials, the standard error of the mean is 15.67

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	4,905.93
Median	4,107.22
Mode	---
Standard Deviation	3,504.37
Variance	12,280,630.64
Skewness	1.38
Kurtosis	5.66
Coefficient of Variability	0.71
Range Minimum	54.96
Range Maximum	33,412.14
Range Width	33,357.18
Mean Standard Error	15.67



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: Gas in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	54.96
95%	864.56
90%	1,273.25
85%	1,629.73
80%	1,968.38
75%	2,296.65
70%	2,632.86
65%	2,975.49
60%	3,334.69
55%	3,721.00
50%	4,107.22
45%	4,525.93
40%	4,978.09
35%	5,462.33
30%	6,008.35
25%	6,630.82
20%	7,364.85
15%	8,280.74
10%	9,610.21
5%	11,806.04
0%	33,412.14

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

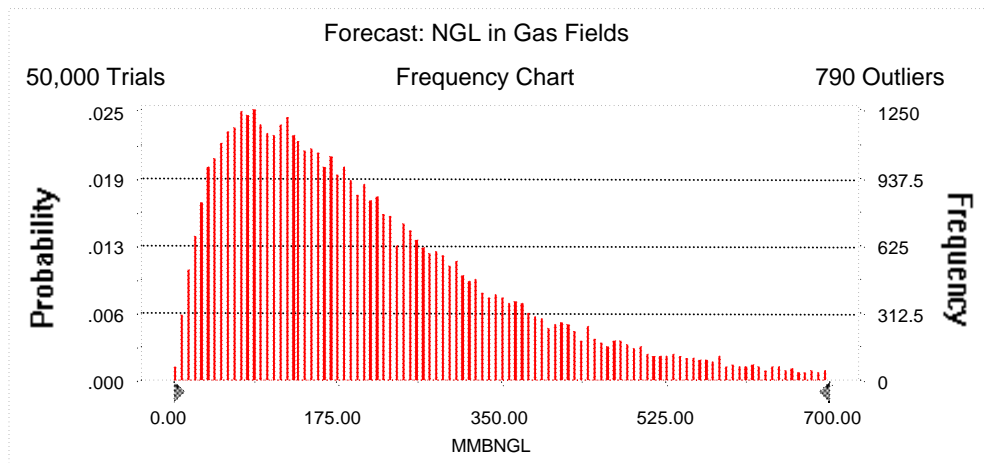
**Forecast: NGL in Gas Fields**

**Summary:**

Display range is from 0.00 to 700.00 MMBNGL  
Entire range is from 2.45 to 1,648.55 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.73

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	215.57
Median	175.90
Mode	---
Standard Deviation	162.48
Variance	26,399.33
Skewness	1.57
Kurtosis	6.65
Coefficient of Variability	0.75
Range Minimum	2.45
Range Maximum	1,648.55
Range Width	1,646.09
Mean Standard Error	0.73



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: NGL in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	2.45
95%	35.83
90%	52.90
85%	67.91
80%	82.23
75%	96.54
70%	111.90
65%	126.50
60%	142.27
55%	158.82
50%	175.90
45%	194.25
40%	213.96
35%	235.74
30%	261.40
25%	290.25
20%	324.11
15%	368.56
10%	429.67
5%	536.55
0%	1,648.55

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

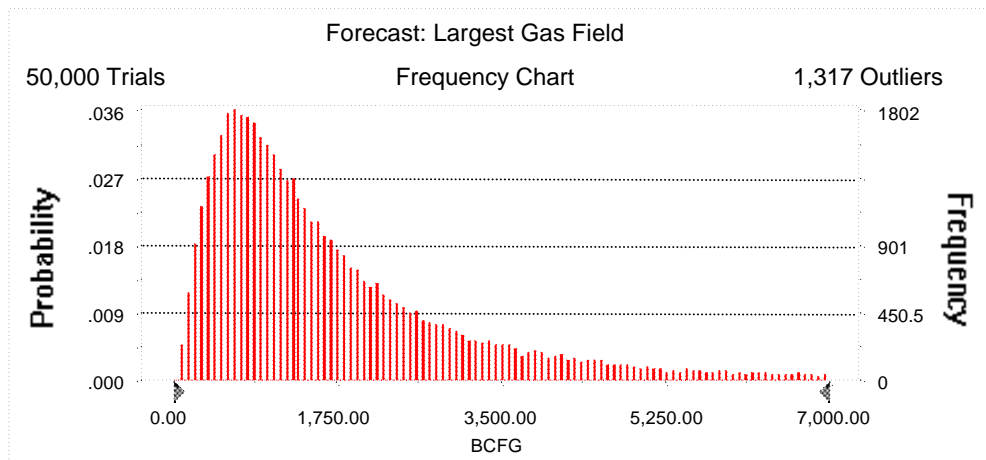
**Forecast: Largest Gas Field**

**Summary:**

Display range is from 0.00 to 7,000.00 BCFG  
Entire range is from 54.96 to 11,997.08 BCFG  
After 50,000 trials, the standard error of the mean is 7.85

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	1,885.91
Median	1,327.49
Mode	---
Standard Deviation	1,754.48
Variance	3,078,208.42
Skewness	2.28
Kurtosis	9.49
Coefficient of Variability	0.93
Range Minimum	54.96
Range Maximum	11,997.08
Range Width	11,942.12
Mean Standard Error	7.85



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: Largest Gas Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	54.96
95%	327.07
90%	454.87
85%	564.28
80%	661.47
75%	758.93
70%	858.50
65%	964.59
60%	1,075.89
55%	1,197.23
50%	1,327.49
45%	1,475.25
40%	1,643.44
35%	1,833.69
30%	2,063.83
25%	2,350.17
20%	2,720.20
15%	3,229.25
10%	4,003.96
5%	5,498.91
0%	11,997.08

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

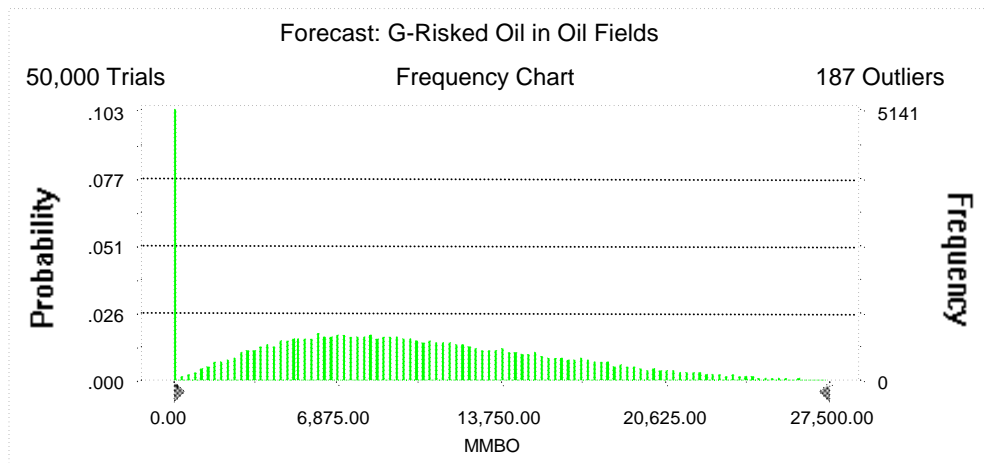
**Forecast: G-Risk Oil in Oil Fields**

**Summary:**

Display range is from 0.00 to 27,500.00 MMBO  
Entire range is from 0.00 to 37,756.92 MMBO  
After 50,000 trials, the standard error of the mean is 28.13

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	9,485.69
Median	8,929.36
Mode	0.00
Standard Deviation	6,290.11
Variance	39,565,533.59
Skewness	0.44
Kurtosis	2.72
Coefficient of Variability	0.66
Range Minimum	0.00
Range Maximum	37,756.92
Range Width	37,756.92
Mean Standard Error	28.13





**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: G-Risk Oil in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	0.00
95%	0.00
90%	0.00
85%	2,695.09
80%	3,874.50
75%	4,834.12
70%	5,700.01
65%	6,503.73
60%	7,296.01
55%	8,109.23
50%	8,929.36
45%	9,739.65
40%	10,629.96
35%	11,571.92
30%	12,567.01
25%	13,707.37
20%	14,963.70
15%	16,421.09
10%	18,172.95
5%	20,717.31
0%	37,756.92

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: G-Risk Gas in Oil Fields**

**Summary:**

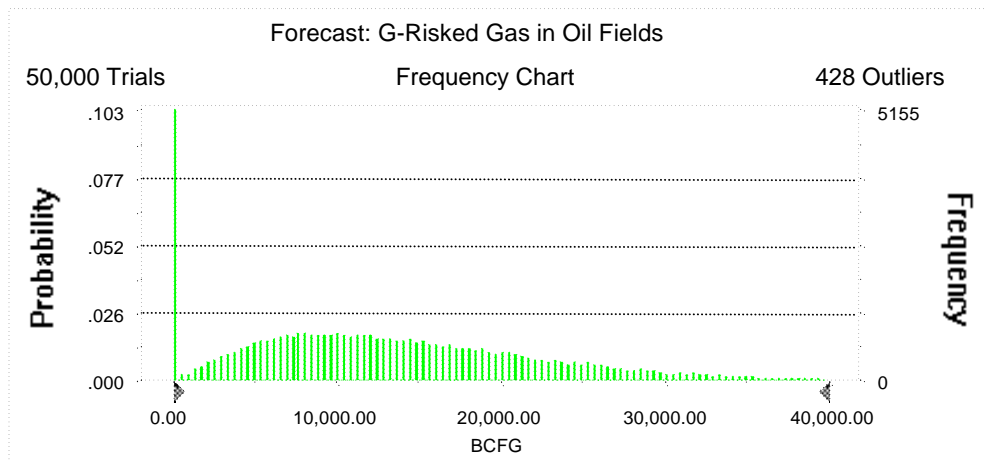
Display range is from 0.00 to 40,000.00 BCFG

Entire range is from 0.00 to 62,517.95 BCFG

After 50,000 trials, the standard error of the mean is 41.86

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	13,260.04
Median	12,045.47
Mode	0.00
Standard Deviation	9,359.20
Variance	87,594,689.63
Skewness	0.71
Kurtosis	3.39
Coefficient of Variability	0.71
Range Minimum	0.00
Range Maximum	62,517.95
Range Width	62,517.95
Mean Standard Error	41.86



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: G-Risk Gas in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.00
95%	0.00
90%	0.00
85%	3,470.72
80%	5,119.02
75%	6,402.44
70%	7,561.00
65%	8,667.00
60%	9,790.49
55%	10,907.24
50%	12,045.47
45%	13,241.81
40%	14,502.25
35%	15,849.09
30%	17,329.46
25%	18,968.96
20%	20,808.78
15%	23,145.39
10%	26,086.11
5%	30,601.93
0%	62,517.95

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

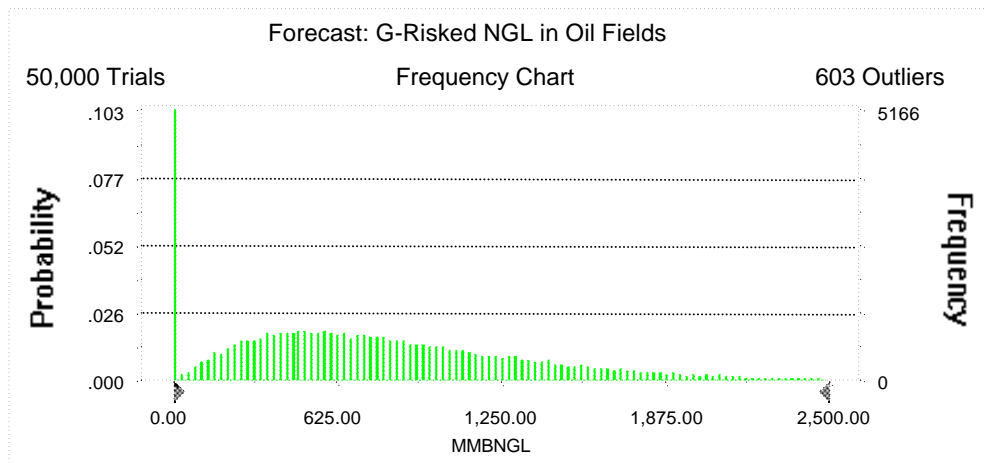
**Forecast: G-Riskd NGL in Oil Fields**

**Summary:**

Display range is from 0.00 to 2,500.00 MMBNGL  
Entire range is from 0.00 to 4,504.35 MMBNGL  
After 50,000 trials, the standard error of the mean is 2.66

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	795.20
Median	702.24
Mode	0.00
Standard Deviation	594.30
Variance	353,193.24
Skewness	0.95
Kurtosis	4.19
Coefficient of Variability	0.75
Range Minimum	0.00
Range Maximum	4,504.35
Range Width	4,504.35
Mean Standard Error	2.66



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: G-Riskied NGL in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.00
95%	0.00
90%	0.00
85%	195.27
80%	285.51
75%	363.27
70%	431.40
65%	497.71
60%	564.65
55%	630.54
50%	702.24
45%	772.91
40%	848.92
35%	933.05
30%	1,025.33
25%	1,128.02
20%	1,253.74
15%	1,403.18
10%	1,598.10
5%	1,914.14
0%	4,504.35

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: G-Risked Gas in Gas Fields**

**Summary:**

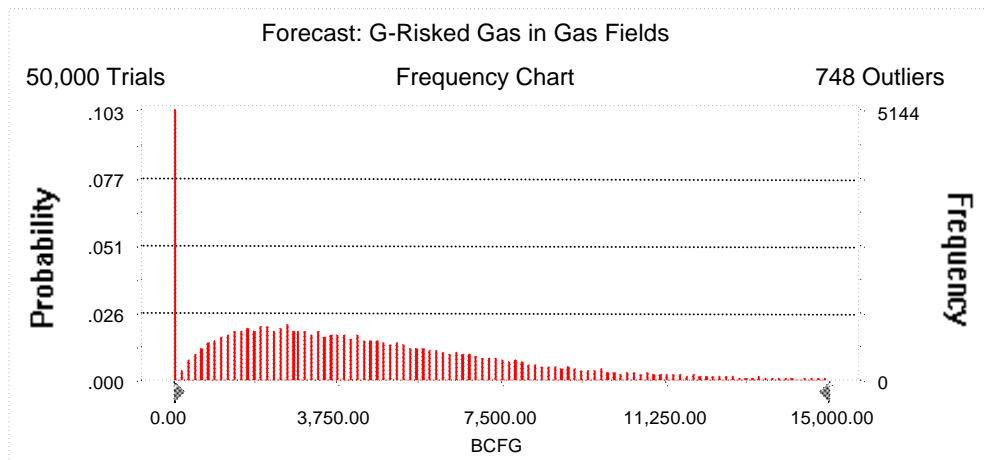
Display range is from 0.00 to 15,000.00 BCFG

Entire range is from 0.00 to 33,412.14 BCFG

After 50,000 trials, the standard error of the mean is 16.28

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	4,412.90
Median	3,681.09
Mode	0.00
Standard Deviation	3,639.58
Variance	13,246,568.73
Skewness	1.27
Kurtosis	5.31
Coefficient of Variability	0.82
Range Minimum	0.00
Range Maximum	33,412.14
Range Width	33,412.14
Mean Standard Error	16.28



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: G-Risk Gas in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.00
95%	0.00
90%	0.00
85%	892.35
80%	1,344.99
75%	1,732.77
70%	2,111.39
65%	2,487.45
60%	2,859.69
55%	3,259.70
50%	3,681.09
45%	4,107.20
40%	4,576.64
35%	5,086.95
30%	5,646.52
25%	6,276.85
20%	7,010.57
15%	7,939.64
10%	9,236.98
5%	11,496.82
0%	33,412.14

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

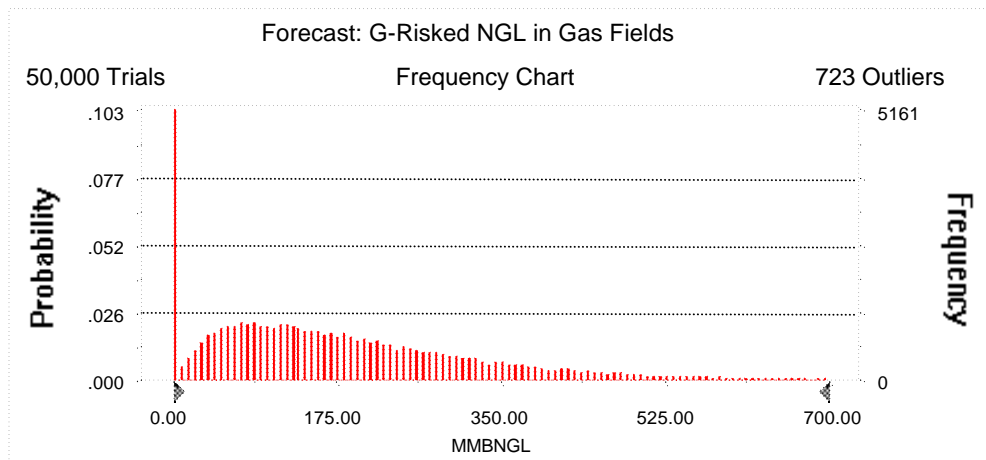
**Forecast: G-Riskd NGL in Gas Fields**

**Summary:**

Display range is from 0.00 to 700.00 MMBNGL  
Entire range is from 0.00 to 1,648.55 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.75

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	193.92
Median	156.98
Mode	0.00
Standard Deviation	167.28
Variance	27,981.57
Skewness	1.46
Kurtosis	6.23
Coefficient of Variability	0.86
Range Minimum	0.00
Range Maximum	1,648.55
Range Width	1,648.55
Mean Standard Error	0.75





**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Forecast: G-Riskied NGL in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.00
95%	0.00
90%	0.00
85%	37.14
80%	55.77
75%	72.24
70%	88.29
65%	105.13
60%	121.77
55%	138.78
50%	156.98
45%	176.07
40%	196.30
35%	218.90
30%	245.01
25%	273.84
20%	308.12
15%	353.16
10%	414.64
5%	520.26
0%	1,648.55

End of Forecast

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Assumptions**

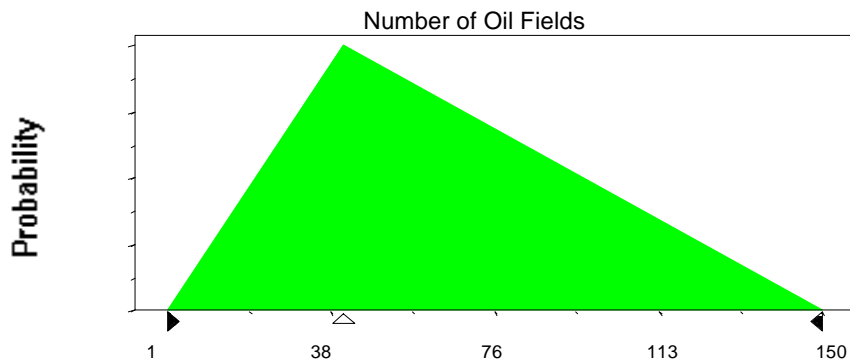
**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	1
Likeliest	41
Maximum	150

Selected range is from 1 to 150

Mean value in simulation was 64



**Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:

Mean	163.63
Standard Deviation	399.66

Shifted parameters

171.63
399.66

Selected range is from 0.00 to 4,592.00

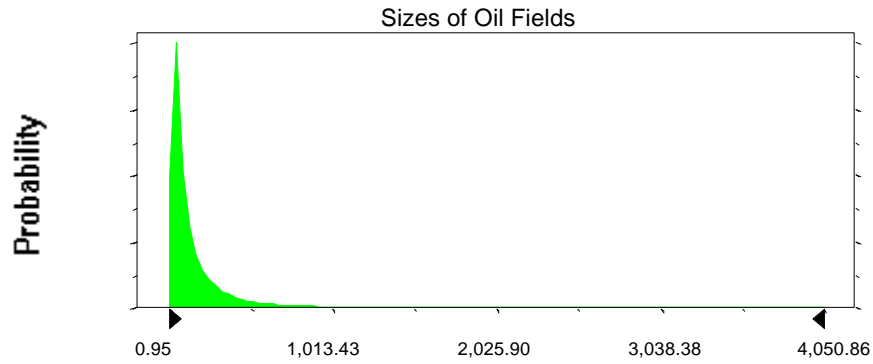
Mean value in simulation was 157.59

8.00 to 4,600.00

165.59

**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Assumption: Sizes of Oil Fields (cont'd)**



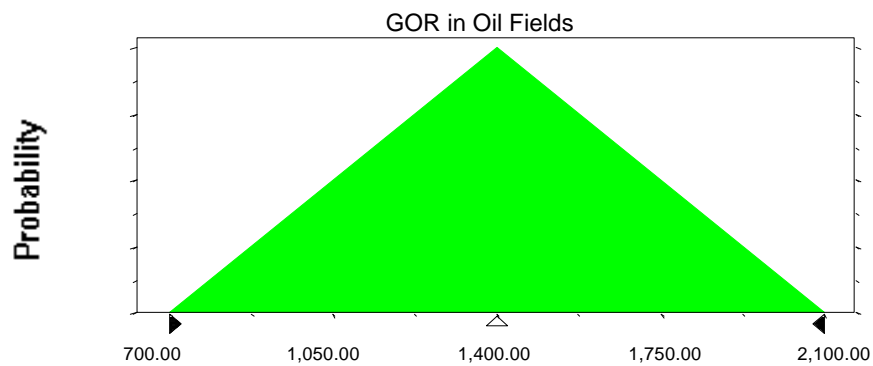
**Assumption: GOR in Oil Fields**

Triangular distribution with parameters:

Minimum	700.00
Likeliest	1,400.00
Maximum	2,100.00

Selected range is from 700.00 to 2,100.00

Mean value in simulation was 1,398.42



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

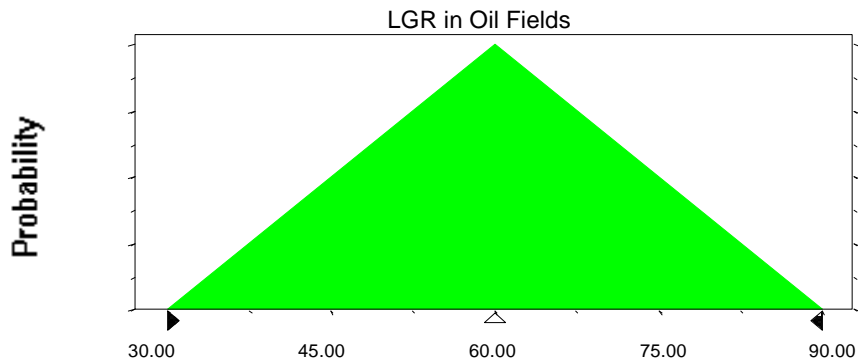
**Assumption: LGR in Oil Fields**

Triangular distribution with parameters:

Minimum	30.00
Likeliest	60.00
Maximum	90.00

Selected range is from 30.00 to 90.00

Mean value in simulation was 60.01



**Assumption: Number of Gas Fields**

Triangular distribution with parameters:

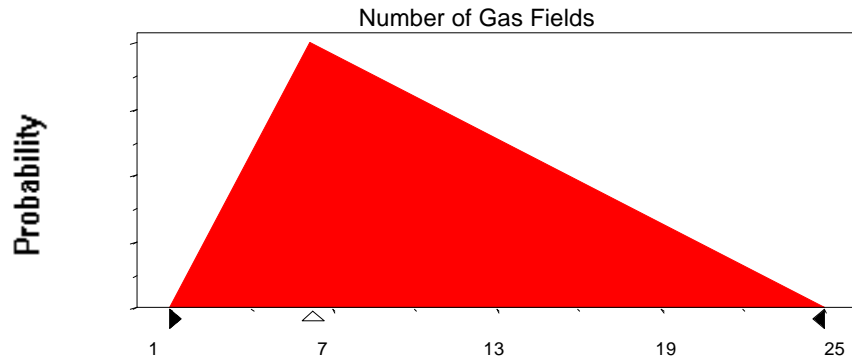
Minimum	1
Likeliest	6
Maximum	25

Selected range is from 1 to 25

Mean value in simulation was 11

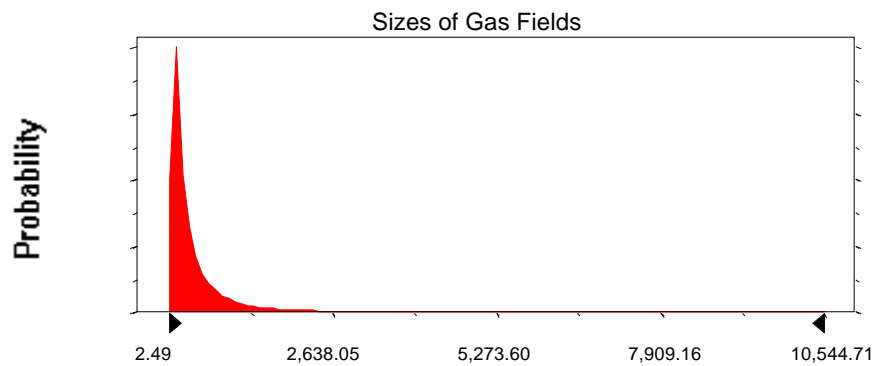
**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

**Assumption: Number of Gas Fields (cont'd)**



**Assumption: Sizes of Gas Fields**

Lognormal distribution with parameters:		Shifted parameters
Mean	426.81	474.81
Standard Deviation	1,040.31	1,040.31
Selected range is from 0.00 to 11,952.00		48.00 to 12,000.00
Mean value in simulation was 408.20		456.2



**60360102**  
**Salt-Structured Deep-Water Sandstones**  
**Monte Carlo Results**

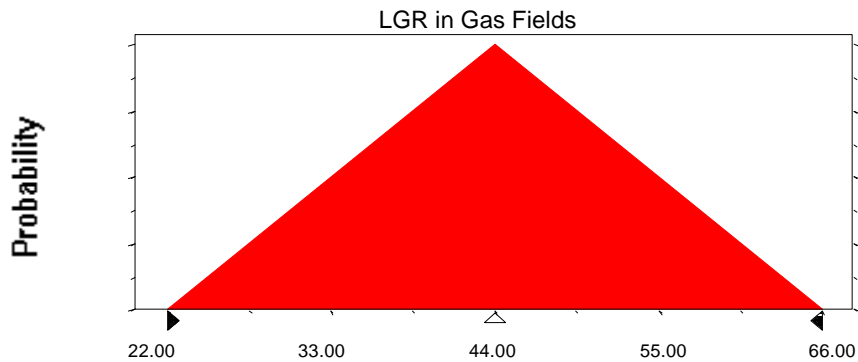
**Assumption: LGR in Gas Fields**

Triangular distribution with parameters:

Minimum	22.00
Likeliest	44.00
Maximum	66.00

Selected range is from 22.00 to 66.00

Mean value in simulation was 43.98



End of Assumptions

Simulation started on 11/8/99 at 16:28:25

Simulation stopped on 11/8/99 at 17:14:18